

CLAIMS

1. A method of correcting a fabrication layout corresponding to an original fabrication layout for proximity effects, the method comprising:
 - executing a routine implementing an inverse proximity effects model for a segment of an edge in an original fabrication layer; and
 - determining a correction for the segment based on a difference between an output from the inverse proximity effects model and an initial position for the segment in the fabrication layout.
2. A computer readable medium for correcting a fabrication layout corresponding to an original fabrication layout for proximity effects, the computer readable medium carrying instructions to cause one or more processors to perform:
 - executing a routine implementing an inverse proximity effects model for a segment of an edge in the original fabrication layer; and
 - determining a correction for the segment based on a difference between an output from the inverse proximity effects model and an initial position for the segment in the fabrication layout.
3. A carrier wave for correcting a fabrication layout corresponding to an original fabrication layout for proximity effects, the carrier wave carrying instructions to cause one or more processors to perform:
 - executing a routine implementing an inverse proximity effects model for a

segment of an edge in the original fabrication layer; and
determining a correction for the segment based on a difference between an
output from the inverse proximity effects model and an initial
position for the segment in the fabrication layout.

4. A computer system for correcting a fabrication layout corresponding to an original fabrication layout for proximity effects, the computer system comprising:
a computer readable medium carrying data representing the original
fabrication layout; and
one or more processors coupled to the computer readable medium, the one or
more processors configured for
executing a routine implementing an inverse proximity effects model
for a segment of an edge in the original fabrication layer, and
determining a correction for the segment based on a difference
between an output from the inverse proximity effects model
and an initial position for the segment in the fabrication
layout.
5. A system for correcting a fabrication layout corresponding to an original fabrication layout for proximity effects, the system comprising:
an inverse proximity effects model for a segment of an edge in the original
fabrication layer, and
a means for determining a correction for the segment based on a difference

between an output from the inverse proximity effects model and an initial position for the segment in the fabrication layout.

6. A method for fabricating a printed features layer including features corrected for proximity effects, the method comprising:

executing a routine implementing an inverse proximity effects model for a segment of an edge in the original fabrication layer;
determining a correction for the segment based on a difference between an output from the inverse proximity effects model and an initial position for the segment in the fabrication layout,
determining an optimal bias for the segment based on the correction;
displacing the segment in the fabrication layout from the initial position based on the optimal bias;
producing a mask based on the fabrication layout with the segment displaced; and
producing the printed features layer in a fabrication process using the mask.

7. A mask for fabricating a printed features layer, the mask including an opaque region having a segment corrected for proximity effects, the segment corresponding to at least one portion of a target edge in an original fabrication layout for the printed features layer, wherein:

the segment is displaced from the corresponding portion by a correction

distance;

the correction distance is based on a difference between an output from an

inverse proximity effects model and the target edge; and

the output is based on executing a routine implementing an inverse proximity effects model with input from the original fabrication layout.

8. A device having a proximity-corrected element, the device produced using a mask including an opaque region having a segment corrected for proximity effects, the segment corresponding to at least one portion of a target edge in an original fabrication layout for the printed features layer, wherein:

the segment is displaced from the corresponding portion by a correction distance;

the correction distance is based on a difference between an output from an

inverse proximity effects model and the target edge; and

the output is based on executing a routine implementing an inverse proximity effects model with input from the original fabrication layout.